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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,082	04/18/2007	Brent E. Green	7865-276 MIS;jb	5501

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EXAMINER	
WEIER, ANTHONY J	

ART UNIT	PAPER NUMBER
1781	

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04/01/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/566,082	GREEN ET AL.	
	Examiner	Art Unit	
	Anthony Weier	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 January 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) *21-25* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/22/07 and 9/11/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I (claims 1-20) in the reply filed on 1/4/10 is acknowledged.

Claim Rejections - 35 USC § 112, 2nd

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 is indefinite in that it is not clear what is encompassed by the terminology "it's natural pH".

Claims 7 and 8 are indefinite in that it is not clear whether the ratios therein are based on weight, volume, or a combination of same.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting

ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-16 and 18-20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. Patent No. 7309773.

Claims 1-16 and 18-20 are generic to or fully encompass the claims of U.S. Patent No. 7309773. In particular, all the process steps of claims 1-17 of U.S. Patent No. 7309773 are largely fully articulated in the instant claims in different combinations of limitations and all fall within the scope of the instant claims.

5. Claim 17 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. Patent No. 7309773 taken together with Kankaanpaa-Anttila et al.

Instant claim 17 calls for the use of isoelectric precipitation to recover flax protein isolate from the flax seed meal. However, such method of separating flax protein from a flax meal is taught by Kankaanpaa-Anttila et al (e.g. col. 3, lines 52-58). It would have been obvious to one having ordinary skill in the art at the time of the invention to have employed such step as a known alternative for isolating flax protein.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3, 5-8, 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Vassel.

Vassel discloses a process wherein whole flaxseed is treated to a mildly alkaline aqueous solution of an alkaline material (e.g. pH 8, see claim 2) at a temperature as called for in the instant claims (e.g. 50 C; col. 4, lines 65-75) wherein said step is employed to remove mucilage from the oilseed, said flaxseed then being crushed with removal of oil therein followed by processing to produce a protein that is substantially pure (e.g. col. 7, lines 1-8) and wherein same may be further refined (e.g. col. 7, lines 52-55). It is expected that such "substantially pure" (and even more) would fall within what is considered to be a "protein isolate". In addition, Vassel discloses for the mucilage extraction a solvent (volume) to seed (weight) ratio of 1:5, for example, as called for in the instant claims (e.g. col. 5, lines 1-3 and 18-20).[1] Vassel further discloses the mucilage removal step being employed for 60 minutes, for example, as well as implementing such extraction multiple times (e.g. Table I and II; col. 5, line 26).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vassel.

If it is shown that the product produced therein would not be of a purity falling within the

terminology "isolate", the following should be noted. However, it would have been obvious to one having ordinary skill in the art at the time of the invention to have attained a protein purity of at least 90% by modifying various variables of the Vassel process such as, for example, increasing the extraction times or repeating same. It would have been well within the purview of one skilled in the art through manipulation of such processing variables to have achieved such protein percentage through routine experimental optimization of said variables.

The claims further call for removing the mucilage using an aqueous solution of sodium bicarbonate. Vassel does not expressly articulate the use of same but is broad enough to encompass treatment using such alkaline salt. Absent a showing of unexpected results due to using soddium bicarbonate over other alkaline material, it would have been obvious to one having ordinary skill in the art at the time of the invention to have employed same as a matter of preference depending on the costs involved of one alkaline source over another as well as which source is more readily available, for example.

The claims also call for the concentration of the alkaline material. Vassel is silent regarding specific amounts but sets forth that such considerations would be dependent on the solvent used, ratio of solvent to flaxseed, etc. (see col. 11, lines 1-19). Clearly, this is a suggestion that such determinations would have been well within the purview of a skilled artisan, and it would have been further obvious to have arrived at such values through routine experimental optimization.

10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vassel taken together with Kankaanpaa-Anttila et al.

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[1] The ratios of claims 7 and 8 are considered as a weight to volume ratio as employed in Vassel. Note that claims 7

Instant claim 17 calls for the use of isoelectric precipitation to recover flax protein isolate from the flax seed meal. However, such method of separating flax protein from a flax meal is taught by Kankaanpaa-Anttila et al (e.g. col. 3, lines 52-58). It would have been obvious to one having ordinary skill in the art at the time of the invention to have employed such step as a known alternative for isolating flax protein.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Weier whose telephone number is 571-272-1409. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anthony Weier

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and 8 are being rejected under 35 USC 112, 2nd paragraph for indefiniteness regarding these ratios.

Primary Examiner
Art Unit 1794

/Anthony Weier/
Primary Examiner, Art Unit 1794

Anthony Weier
March 27, 2010